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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,523	09/14/2007	James T. Craig	31118/DY0401	9899
4743	7590	07/12/2010	EXAMINER	
MARSHALL, GERSTEIN & BORUN LLP			COLILLA, DANIEL JAMES	
233 SOUTH WACKER DRIVE				
6300 WILLIS TOWER			ART UNIT	PAPER NUMBER
CHICAGO, IL 60606-6357			2854	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/589,523	CRAIG, JAMES T.	
	Examiner	Art Unit	
	Daniel J. Colilla	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 30 April 2010.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-24 is/are pending in the application.
 4a) Of the above claim(s) 12 and 16 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-11, 13-15 and 17-24 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 15 August 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>8/15/06; 1/7/10</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: On pg. 7, line 13, of the marked-up copy of the amended specification, applicant refers to “the waveform of Figure 3.” However, the waveform in the drawings is shown in Figure 4.

Appropriate correction is required.

Claim Objections

2. Claims 3 and 18 are objected to because of the following informalities: in **claims 3 and 18**, applicant recites that the light sensitive receiver comprises a “**light emitting diode**.” This appears to be a typographical error since it does not appear that a light emitting diode can be used as a light receiver. It would appear that applicant intended to recite “**phototransistor**” as disclosed throughout the specification. *In order to expedite examination, this claim will be interpreted as if it recited --phototransistor-- instead of “light emitting diode.”* Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 7, 9, 10, 11, 13, 17-20, 22 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Sims *et al.* (US 6,380,965).

With respect to claim 1, Sims *et al.* discloses a printer for printing an image on an image receiving material provided on a backing material (Sims *et al.*, col. 9, lines 58-63), said backing material having regularly spaced markings 70 provided on the back thereof (as shown in Fig. 4 of Sims *et al.*), said printer comprising: a detector 72 for detecting said markings 70; and a device 62 for determining a spacing between two markings (“pitch,” Sims *et al.*, col. 11, lines 55-59), comparing the determined marking spacing with a respective reference value.

While Sims *et al.* does not explicitly disclose this, Sims *et al.* does disclose that the device 62 determines that no pulses are provided by the sensor arrangement (Sims *et al.*, col. 17, lines 1-2). In such a sensor system, this is determined by a comparison of time measured between pulses the measured time being the equivalent of the marking spacing. In a microchip, such as device 62, this measured time must inherently be compared with a reference value (the reference value being a specified amount of time that is allowed to pass) in order for the device 62 to arrive at the determination that the motor has stalled or that the tape has jammed.

When markings 70 are no longer sensed (the spacing differs from the respective reference value by more than a predetermined amount); the device 62 causing printing to be stopped (the printing is linked to strobe signals from the microchip 62 which strobes when a signal from detector 72 is received; Sims *et al.*, col. 13, lines 12-30). Thus when the markings are not sensed strobe signals are not sent and printing is not performed.

With respect to claim 2, Sims discloses that the detector comprises a light sensitive receiver 92 and a light source 90.

With respect to claim 3, Sims *et al.* discloses that the light sensitive receiver comprises a phototransistor (Sims *et al.*, col. 13, lines 59-63).

With respect to claim 4, Sims *et al.* discloses that the light source comprises a light emitting diode (Sims *et al.* col. 13, lines 59-63).

With respect to claim 5, Sims *et al.* discloses that the device 62 is a microchip and thus is a microprocessor.

With respect to claim 7, Sims *et al.* discloses that an error message can be displayed if printing is stopped (Sims *et al.*, col. 16, lines 34-43).

With respect to claim 9, Sims *et al.* discloses a reference value that is a plurality of values defining a range (a first value and a second value, Sims *et al.*, col. 13, lines 2-11).

With respect to claim 10, Sims *et al.* teaches an image receiving material provided on a backing material with regularly spaced markings 70 as mentioned above with respect to claim 1.

With respect to claim 11, Sims *et al.* discloses that the image receiving material is a continuous tape (Sims *et al.*, col. 9, lines 58-63).

With respect to claim 13, Sims *et al.* discloses a printer system for printing an image on an image receiving material provided on a backing material (Sims *et al.*, col. 9, lines 58-63), said backing material having regularly spaced markings 70 provided on the back thereof (as shown in Fig. 4 of Sims *et al.*), said printer system comprising:

a detector 72 for detecting said markings; and a device for determining at least one of a spacing between two markings (“pitch,” Sims *et al.*, col. 11, lines 55-59), comparing the determined marking spacing with a respective reference value.

With respect to claim 17, Sims discloses that the detector comprises a light sensitive receiver 92 and a light source 90.

With respect to claim 18, Sims *et al.* discloses that the light sensitive receiver comprises a phototransistor (Sims *et al.*, col. 13, lines 59-63).

With respect to claim 19, Sims *et al.* discloses that the light source comprises a light emitting diode (Sims *et al.* col. 13, lines 59-63).

With respect to claim 20, Sims *et al.* discloses that the device 62 is a microchip and thus is a microprocessor.

With respect to claim 22, Sims *et al.* discloses that an error message can be displayed if printing is stopped (Sims *et al.*, col. 16, lines 34-43).

With respect to claim 24, Sims *et al.* discloses a reference value that is a plurality of values defining a range (a first value and a second value, Sims *et al.*, col. 13, lines 2-11).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sims *et al.* (US 6,380,965).

With respect to claims 6 and 21, Sims *et al.* discloses the claimed printer except that it is not known to the examiner what the specific reference value is. However, it would have been obvious to one of ordinary skill in the art to adjust the reference value to whatever amount is needed through ordinary, routine experimentation. It would have been obvious to specifically set the reference value to differ from the spacing at 20% or more for the advantage of a large value that would ensure that there was indeed a problem with the feeding of the image receiving material and that it isn't just an anomaly being detected.

7. Claims 8, 14 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sims *et al.* (US 6,380,965) in view of Vleurinck *et al.* (US 2004/0036915).

With respect to claims 8, 14 and 23, Sims *et al.* discloses the claimed printer except for the PC. However, Vleurinck *et al.* discloses a printer 560 used in combination with a PC 562 (Vleurinck *et al.*, paragraph [0101], Fig. 12). It would have been obvious to combine the teaching of Vleurinck *et al.* with the printer disclosed by Sims *et al.* for the advantage of operating the tape printer at a distance from the tape printer itself (Vleurinck *et al.*, paragraph [0103]).

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sims *et al.* (US 6,380,965) in view of Petteruti *et al.* (US 5,267,800).

With respect to claim 15, Sims *et al.* discloses the claimed printer except for the transmitter for sending information related to the detected marking to a computer. Sims *et al.* discloses a printer 26 for printing an image on a image receiving material provided on a backing

material (Sims *et al.*, col. 9, lines 58-63), said backing material having regularly spaced markings 70 provided on the back thereof, said printer comprising: a detector for detecting said markings; and a transmitter for sending information relating to said detected marking to a computer for processing.

While Sims *et al.* does not explicitly disclose this, Sims *et al.* does disclose that the device 62 determines that no pulses are provided by the sensor arrangement (Sims *et al.*, col. 17, lines 1-2). In such a sensor system, this is determined by a comparison of time measured between pulses the measured time being the equivalent of the marking spacing. In a microchip, such as device 62, this measured time must inherently be compared with a reference value (the reference value being a specified amount of time that is allowed to pass) in order for the device 62 to arrive at the determination that the motor has stalled or that the tape has jammed.

When markings 70 are no longer sensed (the spacing differs from the respective reference value by more than a predetermined amount); the device 62 causing printing to be stopped (the printing is linked to strobe signals from the microchip 62 which strobes when a signal from detector 72 is received; Sims *et al.*, col. 13, lines 12-30). Thus when the markings are not sensed strobe signals are not sent and printing is not performed.

Petteruti *et al.* teaches a printer that can be connected to a host computer (Petteruti *et al.*, col. 1, lines 23-27) and can transmit status messages based on the state of the printer to the host computer (Petteruti *et al.*, col. 3, lines 25-27). It would have been obvious to combine the teaching of Petteruti *et al.* with the printer disclosed by Sims *et al.* for the advantage of alerting the user at a remotely located computer that the printer has stopped printing due to a jam or other abnormal state.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Daniel J. Colilla** whose telephone number is **571-272-2157**. The examiner can normally be reached on M and W, 7:30-5:00 and T, Th and F, 8:30-4:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Judy Nguyen** can be reached at **571-272-2258**. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 11, 2010

/Daniel J. Colilla/
Primary Examiner
Art Unit 2854